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(Re)connect social and environmental responsibility to learners' living environments: Curriculum challenges and possible solutions for teaching-learning in Life Orientation

Abstract

An analysis of the National Curriculum Statement indicates a strong focus on the promotion of knowledge in local context, whilst being sensitive to global imperatives. This implies that learning experiences must reflect local realities first; a call which compels teachers to adapt their teaching with the purpose to make learning relevant and meaningful for the learner. It is therefore an appropriate time to ask the key question: Do Life Orientation teachers (re)connect their teaching-learning on social and environmental responsibility with learners' living environments to adhere to curriculum requirements of relevance and meaningfulness? The qualitative data obtained from 13 structured classroom observations, with specific reference to the topic social and environmental responsibility, revealed that Life Orientation teachers experienced challenges. Based on these qualitative findings the researchers propose place-based education as an appropriate teaching-learning strategy to (re) connect social and environmental responsibility with the learner's living environment.

Keywords: Life Orientation, social and environmental responsibility, place-based education

1. Introduction and background

Substantial evidence from recent and past research findings in South Africa indicated that Life Orientation (LO) teaching-learning are not meeting the expectations of learners (Adewumi, 2012: 97; Chabilall, 2012: 122; Ferguson, 2015; Ferreira & Schulze, 2014: 8; Jacobs, 2011: 222; Magano, 2011: 120; Matshoba & Rooth, 2014: 43; Mosia, 2011: 92; Mthatyana & Vincent, 2015: 53-54; Prinsloo, 2007: 163; Swarts, 2016). What learners prefer to happen in LO classrooms is a stronger focus on practical driven approaches (Griessel-Roux, Ebersöhn, Smit & Eloff, 2005: 254; Theron & Danzell, 2006: 410). For example, learners want to learn skills that will equip them to deal with real life issues outside the LO classroom, which affect their lives in their living environments (Magano, 2011: 124;

Mahmoudi & Moshayedi, 2012: 1156). Although the Curriculum and Assessment Policy Statement (CAPS) makes reference to active, critical and creative learning (DBE, 2011: 4), LO teachers appear to struggle to adapt their teaching-learning to reflect the diverse realities of South African life. As Mthatyana and Vincent (2015: 50) put it:

A curriculum aimed at 'life orientation' cannot make sense unless it takes seriously the diverse orientations to life, priorities, meanings and desires that circulate in learners' lived, everyday experiences.

Against this background, we next discuss the place of LO in the National Curriculum Statement (NCS), with specific reference to the Further Education and Training Phase (FET).

1.1 LO in the National Curriculum Statement

CAPS (DBE, 2011), which was implemented from 2012, requires LO teachers to integrate relevant environmental and sustainability concerns into the South African school curriculum. This implies that LO should not be reduced to the cognitive development of learners but the development of values and skills into action competencies becomes equally important. This emphasise the development of a balanced and confident learner on the personal-, social-, intellectual-, emotional-, spiritual-, and physical level as highlighted within LO (Hay, 2015:64; DBE, 2011:8). Such an approach encapsulates the holistic development of the learner. The value of such an approach to learner development lies in the application of acquired knowledge, values and skills that can contribute to a just and democratic society (DBE, 2011:8). Therefore, the emphasis within the NSC is that learners need to acquire knowledge, values and skills that are meaningful to their own lives (DBE, 2011:4). This helps us to understand that life skills education through LO should be viewed as a process, and not a product-driven approach.

To enable learners, in the process to attain relevant knowledge, values and skills, teaching-learning should be based on local realities (DBE, 2011: 4). The emphasis on "local realities" (own emphasis) is a positive step and provides opportunities for a critical and a productive debate on the interaction between the classroom and the learners living environment.

Equally important is that LO also focuses on educating learners that they are connected to other human beings (DBE, 2011: 8). It can therefore be argued that the role of the LO teacher should be to connect knowledge, values and skills to what learners' are familiar with. This principle links with learners' prior knowledge from what they know or have experienced in their local environment (Graham, Berman & Bellert, 2015: 80; Donald, Lazarus & Lolwana, 2006: 91; Marshall, 2016: 21).

Although CAPS requires of LO teachers to contextualise social and environmental issues with the learners' living environments, not much support has been given to them to systematically engage with such curriculum issues (Swarts, 2016: 239). Therefore, our focus in the next section will attempt to clarify the phenomenon social and environmental responsibility in LO.

1.2 The phenomenon social and environmental responsibility in LO

LO put a strong focus on local environmental and sustainable issues which are informed by the South African Constitution (DBE, 2011:1; Le Grange & Reddy, 2017:126). This suggests that lesson experiences should not only be organized around contemporary indigenous socio-environmental issues which many South African communities are vulnerable to but also deepens learners consciousness thereof. Interrogating learners about daily problems that

are facing their communities may lead to them suggesting solutions that can transform their situation. This type of educational approach is hopeful and corresponds with Dei's (2012:115) suggestion that the education site is just not the 'school' but within and throughout communities.

Prominent among the daily challenges which policymakers deemed important for the South African learner to be informed on, are issues such as discrimination, human rights, crime, poverty, food security, food production, violence, HIV/AIDS, safety, security, unequal access to basic resources and the lack of basic services (water and health services) (DBE, 2011: 10). We want to argue that the inclusion of these issues are necessary and an important step, and should therefore not be viewed as mere topics to be covered by the teacher because they are in the LO national curriculum. They are real and affect people's lives. In fact, Buthelezi (2017: 312), Le Grange, Reddy and Beets (2011: 312) as well as Magano (2013:25 – 29), argued that the impact of these socio-environmental issues, for example HIV and AIDS, are felt by local communities. The emphasis should therefore be to equip learners with knowledge, values and skills to make informed decisions and choices and to take appropriate actions to live meaningfully and successfully (DBE, 2011: 8). It can therefore be argued that knowledge, values and skills, as in the case for social and environmental responsibility, should be geared towards life skills and responsible citizenship practices. For the LO teacher to be able to recognise if individual learner growth occur with regard to social and environmental responsibility, thorough planning and preparation is necessary. This calls for LO teachers to be sensitive to contextual (local) and risky socio-environmental issues within the learners' living environments (Dreyer & Loubser, 2005: 134; Lotz-Sisitka, 2012/2013: 30; Msila, 2016: 207), not mere coverage of textbook knowledge of what is prescribed in the LO national curriculum. Place-based education (PBE) could serve here as a potential reference whereby LO teachers can sensitise their learners to the risks of prevailing socio-environmental issues in their living environment and promote an environment and sustainable citizenry. Ontong and Le Grange (2014: 28) explained the significance of such an approach to education as follows:

Using place as a starting point will enable students to understand the localness of environmental problems, even those that transcend national boundaries and that solutions to environmental problems often require local action.

Key to the above explanation of PBE is the connection on policy level with LO. This provides an opportunity for teachers to guide learners not only to think about local socio-environmental issues (Le Grange, 2007: 11), but also to prepare them for change through participation and help address these issues to transform society (November, 2015: 326).

2. Placed-based education: An active force for developing a socio-environmental responsible citizenry at local level through significant teaching-learning experiences

Literature on PBE (Goralnik, Millenbah, Nelson, & Thorp, 2012: 412; Koul & Zandvliet, 2009: 177; Le Grange, 2011: 89; Ontong & Le Grange, 2014: 28-30; Van Wyk, 2014: 56) emphasise, among others, significant features such as constructivism, contextualised learning, experiential learning, active learning and environmental education. PBE, according to Noddings (2016: 17), also provides for connection and meaning making to studies that sometimes deteriorate to the reproduction of facts. On a more practical level, these features of PBE provide LO teachers with a lens through which they can transform teaching-learning

around local socio-environmental issues to encourage learners to become responsible and caring citizens.

Considering the above, it can be argued that PBE holds potential for LO and the practical manifestation of social and environmental responsible behaviour. The reason for this is that PBE grounds the curriculum and teaching in social issues and problems of learners' immediate communities (Meichtry & Smith, 2007: 15; Winograd, 2016). This connectedness to the local environment can add value to the development of responsible citizenship, as stipulated by the DBE (2011: 8). This should be considered as a positive step because the connection between PBE and LO creates the space for teachers to (re)connect learners with their living environment in its totality (natural and social). (Re)connecting learners with their living environment can, according to Ontong and Le Grange (2014: 29), enhance learners' consciousness about their environment which may contribute to discovery of the self, as much as the discovery of (their) place.

Few would dispute that PBE also affords learners with an opportunity to experience their living environment holistically (mind, body and soul). Le Grange (2004: 388-389) referred to such experience as 'embodiment', which typifies a sense of belonging to place. Gough (2006: 49) argued that incorporating the mind, body and soul to place-referenced socio-environmental issues, raises learner awareness on and the questioning of unsustainable practices with the aim to strive for change. This aim is supported by LO where the focus is on addressing skills, knowledge and values about the self, the environment, responsible citizenship and a healthy and productive life (DBE, 2011: 8).

The remainder of this paper will concentrate on the conceptual-theoretical framework, research approach and methodology, research findings, together with a proposed strategy to indigenize and enhance the status of social and environmental responsibility in culture-rich LO classrooms.

3. Conceptual-theoretical framework

The conceptual framework of this paper is underpinned by a constructive approach to teaching-learning. Biggs's (2003:26) notion of constructive alignment between what is being taught, how it is being taught and assessment, is in our opinion a guarantee for successful LO teaching-learning. Biggs's theory, which is rooted in the following three essential questions, guides us as researchers in our argument for successful teaching-learning around socio-environmental issues within the LO curriculum:

- What should learners be able to demonstrate at the end of learning experience?
- Which teaching-learning activities will enable learner engagement to attain the learning outcomes?
- How will the successful attainment learning outcomes be determined?

The aforementioned three questions are essential for improving the quality and relevance of LO teaching-learning (DBE, 2011:5) because research is showing that the ultimate goal of critical and creative learning is geared towards the application and the construction of new knowledge (Niemi, 2002:764). This is particularly important for LO because the emphasis moves towards the *how* and *why* instead of what is taught in classrooms (Nel, 2014:7). This feeds into LO because learners must be encouraged to apply knowledge to real-life problems

through a process of gathering information, considering possibilities, making choices and putting them into effect (DBE, 2011:5; Vakalisa, van Niekerk & Gawe, 2004:28).

The aforementioned also creates the basis for adopting constructivism as the theoretical framework for this study.

Constructivism hinges on aspects that: learners construct their own meaning, new learning builds on prior knowledge, learning is advanced by social interaction, meaningful learning develops through what is referred to as 'authentic tasks', and the roles of teachers and learners are flexible (Grösser, 2014; Khalid & Azeem, 2016; Van den Berg & Schulze, 2014). These aspects relate to the pedagogical principles which guide LO teaching-learning (Nel, 2014: 7-10), as well as PBE.

From the above it is clear that teaching-learning strategies such as problem solving and decision making through critical and creative thinking envisages a classroom as a place of community and enquiry where learners can explore and construct their own knowledge. This offers learners the possibility of democratic participation in socio-environmental issues in their living environments, which links with what Freire (2000:11) referred to as a "dialogic form of education". From an LO teaching-learning perspective, such a form of education should assist learners with relevant and meaningful knowledge, values and skills to become socially and environmentally responsible citizens. Thus, the research question that motivated this study, is: Do LO teachers (re)connect their teaching-learning on social and environmental responsibility with learners' living environments to adhere to curriculum requirements of relevance and meaningfulness?

4. Research approach and methodology

This study was based on a small-scale qualitative research project.

A purposive sampling strategy, based on a conveniently study-sampled population group, was employed. The research participants, of whom four were from former Model C schools and three from so-called *township* schools in the Potchefstroom area, volunteered to participate in this study. These participants were identified based on the following two criteria: they must teach LO in Grade 10 and use either English or Afrikaans as medium of instruction. Participants were informed about the purpose of their participation and the aim of this study. Their identities were concealed.

The data construction phase consisted of structured classroom observations. Merriam and Tisdell's (2016:18) suggestion that observation is a systematic process, encouraged researchers to use a classroom observation schedule, which was adapted and validated specifically for participants of this study (Swarts, 2016: 147), was utilised. This observation schedule focused on three sections: teaching strategy, teaching-learning support material, and assessment. The advantage of classroom observations, according to Vandeyar (2010: 348), is that it provides a lens into the "lived experiences" of classroom life. We therefore share the sentiment of O'Sullivan (2006: 252) that classroom observations as a research strategy prevents generalisations about teaching-learning. Mertler and Charles (2011: 194) further stated that, "observation, as a means of collecting qualitative data, involves carefully watching and systematically recording what you see and hear in a particular setting".

Our interest in classroom observations as a data generation method was to gain an in-depth understanding of participants' competences on the integration of LO

requirements of indigenising local related realities to foster social and environmental responsibility. Because the in situ environment - the real world of participants - was studied, observations were analysed inductively (Newsome, 2016: 17). Although Schumacher and McMillan (1993: 257) indicated that reliability and validity are difficult to establish and maintain through observations, researchers were mindful of Babbie and Mouton's (2002:276) suggestion that, "the key criterion or principle for good qualitative research is found in the notion of trustworthiness". We therefore did not interfere with research participants' provision of knowledge since this would interfere with the trustworthiness of the empirical data. For us member checking, which Guba and Lincoln (1989:196) regarded as the "single most critical technique for establishing credibility", served as a key mechanism to maintain reflexivity by encouraging self-awareness and self-correction regarding the interpretation of classroom observations. These processes ensure internal as well as external validity (Johnson & Christensen, 2012: 394; McMillan & Schumacher, 2010: 300; Struwig & Stead, 2013: 15; Zuber-Skerritt, 2012: 8). Transcripts of classroom observations were regularly shared with research participants after each session. This gave research participants the opportunity not only to review findings, but also to give their inputs (Curtin & Fossey, 2007: 92).

Easy access to schools made it possible to listen to and observe 13 lessons, two lessons at each school, except for one participant who became ill during the course of this study. Lesson observations commenced in the second semester and at the beginning of Week 4 in 2015 (DBE, 2011: 14). Each lesson observation was recorded on a specially constructed data sheet (Swarts, 2016: 147).

As researchers, we integrated tenets of Ubuntu, which include respect for others, an agreement on certain criteria and a dialogue or "mutual exposure" of beliefs (Van Wyk, 2015: 11). Our trust relationship between researcher and research subjects (Bogdan & Biklen, 2003: 35; Nieuwenhuis, 2007: 84) were therefore cemented in a non-participatory strategy. Our aim was not to alter or manipulate the natural environment in which our research participants worked (Gay, Mills & Airasian, 2006: 413).

The ethics committee of the North-West University (Potchefstroom Campus) approved this study. Written permission to conduct this study was also obtained from the North West Department of Basic Education and school principals from the Potchefstroom area.

The following findings are applicable to the selected group of research participants of this study.

5. Discussions and findings

Since understanding is the goal of research (Merriam, 2002: 37), it seems appropriate to include a table which provides contextual information about our research participants because it has the potential to influence teaching-learning (Van den Berg & Schulze, 2016: 71).

Table 1: Overview of research participants' gender, qualifications and pedagogical strategies for Lessons 1 and 2

									Lesson 1						Lesson 2					
								Teaching-strategy		Teaching-learning support material		Assessment strategy		Teaching strategy		Teaching-learning support material		Assessment strategy		
Participant	Female	Male-	PGCE (with LO as specialisation)	ACE (with LO as specialisation)	B.Ed. Hons (with LO as specialisation)	Other (not related to LO)	Former Model C school	Township school	Teacher-centred	Learner-centred	Textbook	Worksheets, etc.	Individual	Group	Teacher centred	Learner-centred	Textbook	Worksheets, etc.	Individual	Group
Α	√		√				√		√		√		V		V		√		√	
В	√		√				√		√		√		√		V		√		√	
С		√				√	√		√		√		√		V		√		√	
D						√	1		√		√		√		V		√		√	
Е		√		V				√	√		√		V		V		√		V	
F		√				V		√	√		√		√		V		√		V	
G	√				√			√	√		√		V		V		√		√	

The underpinning assumption from the above is that participants A, B, E and G, who do have formal training in LO, would consider the importance of a holistic approach towards their lesson themes. However, the data obtained from Lessons 1 and 2, which focused on poverty and HIV/AIDS for the topic "social and environmental responsibility" as presented at the beginning of Week 4 in Term 2 (DBE, 2011: 10), indicated several shortcomings.

5.1 Teaching-learning strategy on lesson topics: Relevance to LO

Participants A and B took advantage of the internet service which their schools provided as an instructional media for poverty and HIV/AIDS during the introduction phases. Such a method, according to Ferreira (2006: 140), is an excellent way to get learners involved in the educational experience. The point that needs to be made is that there was insufficient support given to learners to link such issues to their living environment. Our personal experience, as non-participant observers, was that participants A and B put a damper on active learner involvement through close-ended questions regarding HIV/AIDS that were based on statistics from the internet. Such an approach not only perpetuate the seriousness of HIV/AIDS but supported a reductionist approach in which learners were not afforded the opportunity to discover the underlying systemic connections between social and environmental issues

(du Preez, 2016: 129). For this reason, Wood (2008: 59; 2014: 661) stated that knowledge on HIV/AIDS is not sufficient; the use of knowledge and the translation of it into positive behaviour is important for her.

Nobody was encouraged or given the opportunity to respond to each other's answers and opinions. Learner preferences, such as discussions and conversations on real life issues in LO classrooms (Magano, 2011: 125), were ignored. Schreuder (2004: 16) referred to such education on real life issues, where teachers control learners, as poor education. Their second lesson was in total contrast with their first. Both participants resorted to using textbooks.

Participants C and D obtained their teaching qualifications prior to the introduction of LO as a school subject in 1997. With qualifications such as Religion Studies and Technical Drawings, they lacked the foundational disciplinary background to teach LO (Hay, 2015: 73). The hierarchical position of these LO teachers towards the topics "poverty" and "HIV/AIDS" silenced learners during both lessons.

Unfortunately, overcrowded classrooms created enormous challenges for participants E, F and G. For example, a shortage of textbooks in *township* schools contributed to a teachercentred approach. According to Adewumi (2012: 79) and Rooth (2005: 157), this approach to life skills education through LO is widely practised in South African schools. The shortage of textbooks for LO, as pointed out in the latest UMALUSI report (Matshoba & Rooth, 2014: 54), indicated that learners are withheld from the opportunity to discover useful information around real life issues on their own.

5.2 Teaching-learning support material on lesson topics: Relevance to LO

All participants used learner workbooks / textbooks extensively during the teaching-learning phase for both lessons. It became clear from both classroom observations that all participants displayed a great deal of competence in working with textbook knowledge on poverty and HIV and AIDS, which Kalmus (2004: 471) branded as a "sole, and trusted, source of information" for teachers. Relying on a textbook seems to offer a "one-size fits all" life skills solution to socioenvironmental issues that are multi-faceted (Boler & Aggleton, 2007: 7). It can be argued that what textbook authors deemed important, might not be seen as relevant by learners, which may result in a lack of engagement. We, therefore, agree with Gravett and De Beer (2015: 4), as well as with Beets and Le Grange (2008: 74), that planning for effective teaching-learning, especially with regard to socio-environmental issues, goes beyond mere coverage of facts (knowledge). Since townships schools were included in this study, we would also agree with Magano (2011: 121) that teachers should not isolate the learner from his or her context, which textbooks unfortunately do. Through classroom observations, it also became clear that participants from former Model C schools, which accommodated learners from township schools, are not adequately empowered on socio-environment realities of such learners. Learners should also be equipped with values and skills, not only knowledge, beyond the LO classroom with regard to real life aspects. If effectively integrated with knowledge, learners might be encouraged (if not enabled) to exercise social and responsible behaviour towards real life issues in their environment.

5.3 Assessment on lesson topics: Relevance to LO

What we have learnt, is that participants of this study are not adequately equipped with the necessary pedagogical skills to assist their learners to engage critically with local realities in their living environment when dealing with the themes poverty and HIV/AIDS. We would also add that the strong focus on textbook activities to ascertain whether learning has occurred on poverty and HIV/AIDS at an individual level, where the teacher acted as a soldier to see that learners were busy, added no value to active, critical and creative learning (Gravett & De Beer, 2015: 3). The focus was rather on the reproduction of content on poverty and HIV/AIDS, which is already in the textbook (Van den Berg & Schulze, 2016: 61). Such an approach, according to Fataar and Feldman (2016: 100), can be attributed to the fact that CAPS expects teachers to teach towards the test. It became clear that assessment activities on the lesson topics presented by all participants, led to surface learning. Such learning, according to the latest UMALUSI LO report (2014), should not be entertained. Learners must acquire skills and knowledge, and apply, analyse and contextualise their skills and knowledge gained in LO classes (Matshoba & Rooth, 2014: 60). This is in accordance with what Wood (2008: 59; 2014: 661) referred to as the practical manifestation of knowledge for responsible behaviour.

Although this small-scale qualitative study was mainly exploratory, the above research findings on participants' teaching-learning strategies for lesson themes, which are supposed to encourage social and environmental responsibility, revealed noticeable shortcomings, such as:

- · a lack of commitment to implement policy requirements on active and critical learning;
- the absence of using alternative sources to enact a constructivist pedagogy; and
- the absence of integrating social and environmental issues with learners' live environments to enable the development of 'responsible citizenry' as described in education policy.

In the next section, we suggest a framework that can (re)connect social and environmental responsibility to learners' live environments. We will argue that this proposed framework complies with LO policy requirements and can be adapted by Grade 10 LO teachers to suite their specific context.

Integrating place-based education with LO: A response to enhance social and environmental responsibility in learners' live environments through significant teaching-learning interventions

As researchers, we are aware of Boler and Aggleton's (2005: 5) remark that "expecting teachers to adapt to a different type of teaching, within the confines of a classroom, is often unrealistic especially given the ever present pressures on teachers and the curriculum". However, we are in agreement with Green and Condy (2016: 1), who claimed that, in the South African context, CAPS allows teachers the space to teach in a way that encourages critical and creative thinking. These constructivist approaches to learning, calls for teachers to use the space which is provided by LO to connect active, critical and creative learning to reallife socio-environmental issues. It is time that LO teachers capitalise on these opportunities to raise the status of LO as a fundamental subject (Matshoba & Rooth, 2014: 58) to foster social and environmental responsibility among learners. A textbook-driven methodology towards lesson topics, which should enhance social and environmental responsibility as an outcome among learners, cannot be considered the only feasible way. The reason for such an argument is that the general aims of CAPS (DBE, 2014: 4) clearly state that "the curriculum promotes knowledge in local context, while being sensitive to global imperatives". This implies that LO teachers should harness the local environment to make teaching-learning meaningful for learners.

For participants to act in accordance with the LO policy requirements, it is recommended that teaching-learning should be organised through PBE to ensure active, critical and creative learning on socio-environmental issues. Applying PBE to such lesson topics, which need to enable responsible citizenship, can strengthen the idea that education may become a dynamic social force (Reddy, 2011: 24), where learner input on socio-environmental issues is highly valued (see Figure 1).

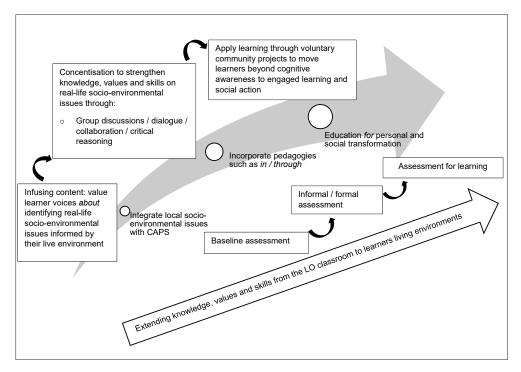


Figure 1: Policy compliant suggestions to (re)connect social and environmental responsibility to learners' live environments through PBE

An integral part of this framework is to empower learners in a holistic way and to ensure the emerging humanness of the individual. Therefore, the incorporation of learners' live environments has the capacity to enhance the meaning of social and environmental responsibility. Furthermore, this suggested framework makes provision for different ways of assessment, learning pathways (about, in/through and for), critical reflection and the local reality (see, for example, Lotz-Sisitka, 2011: 69).

The following steps offer a useful constructive approach towards (re)connecting social and environmental responsibility with learners' live environments.

Learner engagement in identifying risky socio-environmental issues, which they deem important in their live environments, can be considered the first step to accommodate LO requirements on active, critical and creative learning as well as local relevance. In this way, learners become social critics of socio-environmental issues in their live environments (Aliakbari & Faraji, 2011: 79) which affect their lives. Linking teaching-learning to learners' live environment is a constructive alignment with what Plevin (2016: 18–19) refers to as "curriculum-in-use". Through this act, the LO teacher becomes what Freire (2000: 11) referred

to as an agent for social change and not a mere conveyer of textbook knowledge as an outside source.

During the second phase, learners critically examine identified risky socio-environmental issues in their live environments through group discussions, dialogue, collaboration and reasoning. Inquiring, expression, reflecting, critical thinking, and organising ideas become important. This may ultimately lead to the unlocking of learner's creativity regarding the identification of risky socio-environmental issues. These processes are important because a textbook-driven method on socio-environmental issues can lead to the "fragmentation of skills and knowledge" (Macedo, 1994: 17). The shift is, therefore, from teaching to learning, which is in line with a constructivist method. Through this it is envisaged that the specific aims of LO namely 'to develop learners', 'to prepare learners', 'to equipped learners', and 'to expose learners' (DBE, 2011:8) will ensure individual growth and holistic development (DBE, 2011:8) around the challenges of real life socio-environmental issues, as identified by them. For this to happen, it is important that the LO teacher creates a classroom atmosphere in which respect and reasoning can flourish (Nel, 2014: 10). The aim should be to nurture thinking skills, express ideas and encourage learners to use their constructed knowledge to become responsible citizens (Noddings, 2005: xiii) in their live environments. Although more effort will go into planning to ensure that teaching-learning is effectively based on a constructivist idea, LO teachers can develop a sense of ownership (Boler & Aggleton, 2005: 6) in the way they approach real life socio-environmental issues identified by their learners. Dreyer's (2014: 126) statement that assessment should be based on learning intentions and competencies to be acquired, suggests that assessment activities with social and environmental responsibility as the outcome, should be conducted with care. Bloom's taxonomy may serve as a guideline for LO teachers to design quality assessment activities on different cognitive levels for their learners.

During the third stage, the application of assessment for learning, which focuses on learner growth and development (Lombard & Nel, 2014: 91), becomes important. Learners can be encouraged to participate in a small scale, voluntary local community project. Through this service-learning component, learners are granted the opportunity to apply and contextualise their knowledge, values and skills through social action (Matshoba & Rooth, 2014: 60). Lotz-Sisitka (2012/2013: 30) called this meaning-making process "learning as connection" which seeks to ignite responsible citizenship.

A positive add-on to this framework is that teachers are encouraged not to stick to the minimum LO curriculum requirements for lesson experiences that are linked to social and environmental responsibility. LO teachers are encouraged to familiarise themselves with socio-environmental issues in the local community in which they find themselves.

To realise the valuable contribution of this suggested framework towards enhancing social and environmental responsibility among learners in their living environments, is to expose participants in training for effective implementation.

7. Conclusion, limitation and future directions

We are in agreement with Fullan (2007: 37) that the implementation of any new programme or policy is linked to three fundamental principles: new or revised material, possible new teaching approaches, and the alteration of beliefs. However, to put emphasis on local realities in the LO curriculum will not just happen because there is a policy desire to do so. We, therefore,

suggested a practical and useful strategy to enhance social and environmental responsibility on risky socio-environmental issues in the learner's living environment through PBE.

Although this study focused on seven research participants in the Potchefstroom area, it places the emphasis on the need for more intensive research on content and context to (re) connect social and environmental responsibility with learners' live environments. Such an initiative has the potential to enhance networking among Life Orientation academics, with the broader aim of raising the status and value of this fundamental (compulsory) school subject among learners.

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